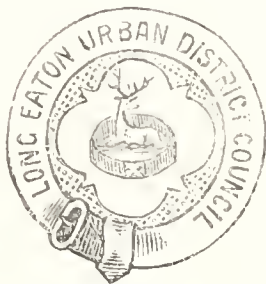


LONG EATON
URBAN DISTRICT COUNCIL.



ANNUAL REPORT

OF THE
MEDICAL OFFICER OF HEALTH,
ON
THE SANITARY CONDITION
AND VITAL STATISTICS
FOR THE YEAR 1905.

BY
ANTONY B. CHAMBERS, M.D., M.C.H., Lond.

MEDICAL OFFICER OF HEALTH.

JANUARY 3rd, 1906.

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TO THE CHAIRMAN AND MEMBERS
OF —
THE LONG EATON URBAN DISTRICT COUNCIL.



GENTLEMEN,

I have much pleasure in presenting you my Nineteenth Annual Report for the year ended 1905.

Before doing so, however, I should like to point out that it has often occurred to me that the Council may think that the Report often contains a number of small details that the Council are already aware of, and, therefore, appear to be unnecessary. But, as the Local Government Board and the County Council have also to be provided with a copy of the Report, these details are essential. The Local Government Board expect a record to be kept of all the matters that affect the sanitary condition of the district during the year, its progress and growth, and the sanitary requirements that are adopted to meet this increase.

CONTENTS OF REPORT.

The Report should be chiefly concerned with the conditions affecting the health in the district, and with the means for improving these conditions. It should contain an account of any improvement or deterioration of these conditions. To report on any influences affecting, or threatening to affect, injuriously the public health, and on the action which has been taken, or which may still be needed to combat these influences.

As subjects concerning which the Annual Report should give information, the following deserve to be especially mentioned:

- 1.—Physical features and general character of the district.
- 2.—Chief occupations of the inhabitants and the influence of any particular occupation on public health.
3. House accommodation—especially for the working classes, its adequacy and fitness; sufficiency of open space about house; cleanliness; supervision over erection of new houses.
- 4.—Sewerage and drainage: its sufficiency in all parts of the district; condition of sewers and house drains; method of disposal of sewage.
- 5.—Excremental disposal: system adopted: defects, if any.
- 6.—Removal and disposal of house refuse, frequency and method.
- 7.—Water supply of the district, source, nature, sufficiency, wholesomeness and freedom from risk of pollution.
8. Places over which the Council have supervision, *e.g.*, lodging-houses, slaughter-houses, drains, cow-sheds, milk-shops, bakehouses, factories, work-shops, and offensive trades.
- 9.—Bye-laws enforcement, amendments, or further bye-laws.
- 10.—Nuisances: proceedings for their abatement.
11. Methods of dealing with infectious diseases: notification: isolation hospital and its accommodation: disinfection.

With regard to all these points it should be borne in mind that these reports are for the information of the Local Government Board as well as for the Council of the District, and

that a statement of the local circumstances and local sanitary conditions which may seem superfluous for the latter may be needed by the former.

12. -- Section 132 of the Factory and Workshops Act, 1901, requires that the Medical Officer of Health shall, in his Annual Report, report on the Administration of this Act in Workshops and Work-places in his District.

13. -- The Report to deal with the extent, distribution, and causes of Epidemic and Notifiable Diseases, stating the results of enquiries made into their origin and propagation and the steps taken with a view to check their spread.

Although the District increases rapidly year by year, still the vital statistics remain unaltered, and indicate a high standard of health, in spite of increase and density of population with all its risks and influences on public health. The General Death-rate for the year is 11·4. It has remained stationary for several years; the average for the last ten years is 11·5. The Infantile Mortality rate this year is also much below the average—it is 123 against 197 in 1904, and 142 in 1903. I consider this a most satisfactory improvement. The total number of deaths under 1 year was 55 against 75 in 1904. I hope this improvement will continue, and that another year will bring a further improvement. It shows a more intelligent interest in the care of infants. The number of cases of infectious diseases reported this year is considerably in excess of that for the last ten years, especially Scarlet Fever, Measles, and Diphtheria. The principal cause of spread was school-infection. The Council, at my suggestion, have this year generously afforded the Town the opportunity of having antitoxin supplied free in all cases of Diphtheria. A supply is kept at the local chemist shop, so that even the poorest people

can have this useful remedy supplied gratis in all cases of Diphtheria. This has a double advantage. It not only supplies the most potent remedy for the cure of Diphtheria, but it also checks its spread. It is most desirable that there should be a supply always at hand, as the remedy, to be of any use, must be applied early. Since the introduction of antitoxin, the deaths from Diphtheria have been very much reduced. No child suffering from Diphtheria has much chance of recovery who has not been treated by antitoxin. It must, therefore, be a great satisfaction to the District to know that a supply is at hand, and that every child has a fair chance of its life being saved.

Another most satisfactory record for the Town is that there has not been a single case of Enteric Fever reported during the year. The number of cases of Enteric Fever have gradually diminished for the last ten years: last year there was only one, and the year before one.

But this is the first year for the last 20 years that there has been no case of Typhoid Fever reported. It speaks well for our Water supply, of which a most satisfactory analysis has recently been made, and also for the drainage of the District. This is most important, as the Town is growing rapidly and an efficient drainage is most essential to health. Defective drainage, while not directly contributing to disease, lowers the system, undermines the public health, and exposes the population to the risk of catching infectious diseases where they might under other circumstances escape. Robust health is necessary to the resistance of disease.

One matter I would draw the Council's attention to, and that is the increase of Smoke Nuisance from the factory chimneys all over the District of recent years. There is always a certain amount of unavoidable smoke, but there is

a large percentage of black smoke given out by the factory chimneys that could be avoided with better care on the part of the firemen. I would suggest that notices be posted and posted up in the boiler-houses calling the attention of the men to the abatement of this nuisance, neglect of the fire and then throwing on damp slack into the hot fire-places, which cannot consume all the carbon, is generally the principal cause. There are now a large number of factories in the District, the nuisances rather increases than diminishes.

OTHER SANITARY REQUIREMENTS OF THE DISTRICT.

1. -Construction of Filter Beds at Sewage Farm.
2. -Refuse Destructor for the large heap of Refuse now at the Sewage Farm.

SUMMARY OF REPORT.

SANITARY DISTRICT.

Area in acres	2009
Rateable Value	£71,793
Assessable Value	£56,119
Inhabited Houses, 1891	1919
.. .. 1902	2689
.. .. 1903	2974
.. .. 1904	3139
.. .. 1905	3374
New Houses erected, 1901	66
.. .. 1902	100
.. .. 1903	100
.. .. 1904	100
.. .. 1905	235

VITAL STATISTICS.

Population, census 1891	9636
.. .. 1901	13045
.. 1902	13500
.. 1903	13840
.. 1904	14640
.. 1905	15300
Number of Persons per house	4.56
Number of Persons per acre	7
Tenements with less rooms than 4, 1891	56
Tenements with less rooms than 4, 1901	43
Number of Deaths registered during 1904	171
Death-rate per 1000, 1904	11.6
Number of Deaths registered during 1905	175
Death-rate per 1000, 1905	11.4
Zymotic Death-rate, 1904	1.02
Zymotic Death-rate, 1905	1.4
Infantile Mortality rate per 1000 Births, 1904	197.3
Infantile Mortality rate per 1000 Births, 1905	123
Deaths from Phthisis, 1904	16
Death-rate from Phthisis, 1904	1.09
Death from Phthisis, 1905	16
Death-rate from Phthisis, 1905	1.04
Death-rate from Filth Diseases, 1904	0.7
Death-rate from Filth Diseases, 1905	0.4
1 Death to every 87 of the Population.	
Number of Births registered during 1904	380
Birth-rate per 1000, 1904	25.8
Number of Births registered during 1905—444	{ Males 215 { Females 229
Birth-rate per 1000, 1905	28.9
Males registered 1904—196; Females—184; Total 380.	
Males registered 1905—215; Females—229; Total 444.	
Increase of Births 1905 over 1904	64
Excess of Births over Deaths, 1904	20.9
Excess of Births over Deaths, 1905	26.9
Natural increase of Population	26.9

Table of Vital Statistics for 10 Years.

	YEAR										AVERAGE Ten Years
	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905	
Birth rate per 1000 of the Population	..	30.6	31.1	28.8	25.9	29.5	28.07	26.08	25.8	28.9	28.3
Total Death rate per 1000 of the Population	..	10.3	13.0	11.9	11.8	12.7	10.4	11.2	11.6	11.4	11.5
Death rate from 7 principal Zymotic Diseases	..	0.5	2.0	1.8	1.0	0.5	0.3	0.3	1.0	1.4	0.9
Rate of Infantile Mortality per 100 Births	..	112	177	131	138	162	126	142	137	123	145
Death rate from Births per 1000 of the Population	..	0.5	1.2	1.1	0.8	1.2	1.1	0.7	1.0	1.01	0.9
Death rate from 10 Diseases per 1000 of Population	..	0.4	1.5	0.7	0.3	0.3	0.2	0.1	0.7	0.7	0.6
General Death rate.	1901 .. 1905 ..	Birth rate. 1901 .. 25.8 1905 .. 28.6	Zymotic Death-rate.		Death-rate from Fifth Diseases.		Death rate from Principal		Infantile Mortality		
			1904 .. 0.5 1905 .. 0.9	1904 .. 1.5 1905 .. 0.6	1904 .. 0.1 1905 .. 0.0	1904 .. 0.1 1905 .. 0.0	1904 .. 0.1 1905 .. 0.0	1904 .. 0.1 1905 .. 0.0	1904 .. 0.1 1905 .. 0.0	1904 .. 0.1 1905 .. 0.0	

Births Registered—Birth-rate.

The number of births registered during the year was 114; of these 215 were males and 229 females, against 380 in 1904, shewing an increase since last year of 64, giving a birth-rate of 28·9 per 1000 against 25·8 last year. There is a distinct increase in the birth-rate this year, still it is much below the average of England and Wales. Legislation is still defective in the registration of still-born children, of which we have little or no account. All children born, whether still-born or not, ought to be registered under certificate of medical men, especially since the introduction of the Midwife's Act, who now attend to a large number of the working population. There were only 16 deaths registered as premature births: this gives no idea of the number of premature births during the year. The registration of deaths, as at present required by law, is most unsatisfactory and requires further legislation. It is now open to a great many irregularities, especially with regard to the insurance of young children. The birth-rate of a manufacturing town is of great importance, as there appears to be an inheritance of skill amongst the workers, whose children succeed their parents in the same trade are much more adapted by nature to skilfully work in their parents trade than labour introduced from outside sources: so that an increasing birth-rate of healthy children is essential to the progress of a manufacturing town.

Mortality Death-rate.

The number of deaths registered during the year was 175 against 171 last year, giving a death-rate of 11·4. Although the population increases rapidly, yet the number of deaths still keeps low, and the death-rate per 1000 is one of the lowest in the whole county. Of those deaths nearly one-half occurred under five years of age, 55 occurred under one year

of age, giving an Infantile Mortality of 123 per 1000 of the population. Such a large number of deaths at this age is a great waste of life, as a great many are preventible. In some towns there is a committee of lady visitors who divide the district among themselves and visit the homes of young parents, giving instruction on the feeding and management of infants. I should like to see such a committee started here. It would be of the greatest service; a large number of young mothers in this Town work in factories up to the time that they get married, quite unacquainted with the duties and obligations of their new condition: not being accustomed to help their mothers at home in the rearing of the younger members of the family are quite lost when they have a family of their own. Improper feeding of the children contributes greatly to so large a death-roll among infants; to those mothers such a visiting committee would be of the greatest service and the means of saving many valuable lives that die young.

The following are the causes of death:— Measles, 4; Scarlet Fever, 2; Whooping Cough, 2; Diphtheria, 7; Croup, 2; Diarrhœa, 7; Enteritis, 6; Phthisis, 16; Cancer, 8; Bronchitis, 15; Pneumonia, 5; Premature Birth, 16; Heart Disease, 18; Suicides, 3; Apoplexy, 5; Convulsions, 10; all other causes, 40; Total, 175.

There were 4 deaths from Measles. During the months of June and July there were a great number of cases of Measles; it is not possible to give the correct number, but from information I received there must be from 150 to 200 cases; generally slight and spreading rapidly amongst the infant schools. Having occurred in summer time the death-rate from Measles was very low, not being complicated by Brouchitis or Pneumonia.

There were only 2 deaths from Scarlet Fever out of 182 cases reported. They were chiefly slight cases.

There were 7 deaths from Diphtheria out of 46 cases notified. The death-rate in this disease was much higher than in Scarlet Fever, some of the cases being very severe.

There were only 7 deaths from Diarrhœa, which shows a great improvement, and none of them under 12 months of age.

There were 6 deaths from Enteritis all under 1 year of age, probably due to improper feeding.

PHTHISIS.—There were 18 deaths from Tubercular Diseases. Our district has more Tubercular Disease than any similar town in Derbyshire. This year 600 cards with printed notices were hung up in all the factories and workshops in the district, the elementary schools, and public houses, calling attention to the danger of spreading Phthisis through spitting on the floors and staircases of factories and workshops, and the pavement in the streets. The head teachers of the schools were instructed to call the attention of children to the danger of spitting as a means of spreading Consumption.

There were no deaths from diseases of the Respiratory Organs. Cough and Cold, Bronchitis, and Pneumonia are very common in winter time. People working in heated factories soon catch cold when coming out into the cold air again. The working hours here are very early, four o'clock, the coldest air of the day.

There were only 16 deaths registered from Premature Birth. This does not in any way give the number of deaths from Premature Births, and there must be many more that are not registered. Legislation is badly needed to regulate the registration of all deaths from Premature Birth and their cause.

Infantile Mortality.

There were 55 deaths under 1 year of age, and 27 under 5 years, giving in all 82 deaths under 5 years of age. Nearly half the total deaths registered were under 5 years of age giving 123 per 1000 of the births against 197.3 per 1000 in 1904, showing a very great improvement in the Infant Mortality rate. That the Infantile Mortality is greatly influenced by dieting and clothing and local surroundings there is no doubt. Improper feeding and clothing are largely responsible for a great number of the deaths from Diarrhoea and Wasting Diseases.

The following table shows the cause of death in children under five years of age :—

Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Croup.	Diarrhoea.	Enteritis.	Phthisis.	Bronchitis.	Pneumonia.	Premature Birth.	Heart Disease.	Tabes Mesenterica	Convulsions.	All other Causes.	Total.
4	2	2	5	2	7	6	2	11	2	16	1	2	10	10	82

The following table shows the causes of Infants' deaths during 1905 :—

Whooping Cough.	Diarrhoea.	Enteritis.	Bronchitis.	Pneumonia.	Premature Birth.	Heart Diseases.	Tabes Mesenterica.	Convulsions.	All other causes.	Total
2	6	5	7	1	16	1	2	7	2	53

There were 5 inquests held during the year:—1 Hanging, 1 Suffocated, 1 Drowning, 1 Abscess on Brain, 1 Poisoning, (three suicides).

Other influences besides Infectious Diseases which affect the Public Health and are capable of Removal or Mitigation.

Amongst those I place in the front rank, *Poverty*, as one of the principal factors in producing physical deterioration of the race. If a child has not plenty of good food to eat and properly clothed he does not grow: he becomes stunted, nature instinctively dwarfs him in order to save his life. His mind is also stunted. If a man has not enough to eat he cannot work: to save his life he avoids work, as he cannot work and starve at the same time. If a woman is badly fed she produces delicate offspring, which, owing to her poverty, gets no chance to recover after birth. The influence of poverty is specially manifested in two diseases—*Phthisis*, which kills in England and Wales over 40,000 persons, and *Diarrhœa*, which kills nearly 14,000. Although Phthisis attacks people in all stations in life, the greatest prevalence is amongst the very poorest. The conditions which predispose to Phthisis are damp, dark, dirty, over-crowded houses and drink, all connected with poverty. Poverty not only causes Phthisis, but it is one of the chief causes in spreading it. If Phthisis breaks out in a crowded and poor family, where they cannot protect themselves, other members of the family are almost sure to get it sooner or later. Drink, also, is a fruitful cause of poverty and want, and deserves the most earnest attention of all guardians of public health.

The influence of poverty in Diarrhœa is not so apparent as it is in Phthisis. In hot and dry summers infants are dying

by hundreds in the large towns through improper feeding. Unwholesome milk is generally considered the principal cause, but as many children die from want of milk as from impure milk, this is where poverty comes in as a principal cause. What happens amongst the poor? The mother, half-starved herself, cannot produce milk for her infant: sufficient money is not left—after paying rent, rates, and drink—to buy fresh milk for the child. She is obliged to resort to the purchase of cheap food, with the result that the child dies, and death is ascribed to some other cause, while poverty and the resulting want of proper nourishment is the direct cause of a number of the deaths of these poor starved infants.

What is the use of supplying clean milk and healthy food to people when the milk is put into dirty vessels? What is the use of supplying sterilised milk to people who cannot afford to buy it? The whole responsibility for the excessive mortality of infants must not be left to the sanitary officials for, no matter how perfect the sanitation of a place may be, until other causative factors are removed there will always be this excessive mortality, and we must therefore call the attention of social reformers to this problem of poverty.

The Effects of the abuse of Alcohol on Public Health.

We all know that the number of deaths registered as occurring through alcohol give no idea of the correct number which are directly caused by the abuse of strong drink, and, even if the correct number were found, it would not convey the amount of injury done to the public health by the abuse of strong drink. Alcohol is one of the principal causes of disease. It is one of the leading causes of Poverty. It is also one of the potent causes of poverty and all its evil consequences. It has also a great influence on Infantile Mortality. Children born of alcoholic parents are mentally

and physically enfeebled, and unfitted for the struggle of life, less able to resist disease, are the first victims of poverty. A great number of children born of alcoholic parents soon fall victims to Bronchitis, Convulsions, Diarrhœa, and Accidents, which are really due to the carelessness on the part of parents that are habitually drunk. How many premature births are due to alcoholic excess? Its effects as a cause of insanity amongst adults: in fact no time of life is free from its lethal influence. Here, again, as a cause of poverty, much of this evil must be placed in the hands of the social reformer. There is no doubt that it is a most potent agent of physical deterioration, which leads to degenerating changes in all the organs of the body, ending in mental and physical disease. The clergy of all denominations have a grand opportunity of helping to remedy this dread disease. Some diseases are preventible, and this is one, but not exclusively by the sanitary authority. In many diseases the moral and social factor are equally important: in other words their prevention is as much the concern of the social reformer as of the sanitary authority, and any measures adopted for diminishing the loss of life, without taking in this aspect of the question, will only be partially successful. All these problems have relation to schools and school children, and it is here that the greatest results must be looked for in the future in improvement in the public health. To commence with the parents is commencing at the wrong end. The mischief is then done. It is difficult to root out old habits and fixed ideas once contracted. It is much easier to teach young children habits of decency, temperance, cleanliness, and the simple laws of health, than to correct these faults in grown up people. To the schools, therefore, you must look for improvement in all social evils. Girls should be taught what are the best and most economic foods and clothing to buy and how to cook. It very often happens that those who earn the least wages spend their money to the

best advantage. Perhaps if the loss of life was represented by a money value the question would receive more attention.

A strong working man should have a working life of 40 years. His average weekly wage may be put down at £1, which represents the value of the work done by him. His producing value to the State would be about £2000. Therefore, this large sum is lost to the State for every male child which loses its life from what are known as preventible diseases.

Senile Mortality.

Of the 175 deaths registered there were 35 over 65 years of age against 29 last year.

The following table shows the causes of death over 65 :

Phthisis.	Other Tubercular Diseases.	Cancer.	Bronchitis.	Pneumonia.	Cirrhosis Liver.	Heart Disease.	All other causes.	Total.
1	1	5	2	2	2	7	17	37

Zymotic Mortality.

Included in this class are the seven principal Zymotic Diseases—Small-pox, Measles, Scarlet Fever, Diphtheria, Enteric, Whooping Cough, and Diarrhoea—there were 22.

The following table shows the causes of death : —

Small-pox.	Measles.	Scarlet Fever.	Whooping Cough.	Diphtheria.	Diarrhoea.	Enteric.	Total.	Zymotic Rate.
0	4	2	2	7	7	0	22	0.9

The following table shows the deaths from the seven principal Zymotic Diseases for the last ten years :—

Diseases.	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
Small-pox	0	0	0	0	0	0	0	0	0	0
Measles	1	0	3	0	2	0	0	0	1	4
Scarlet Fever ..	0	0	4	0	1	0	0	2	1	2
Diphtheria	0	3	3	3	0	0	1	1	3	7
Whooping Cough ..	0	3	0	3	0	1	1	0	0	2
Enteric Fever ..	3	4	0	0	3	2	2	0	1	0
Diarrhoea	1	11	7	4	1	5	1	2	9	7
Total	5	24	17	10	7	8	5	5	15	22

Average for the last ten years—11.8.

Infectious Diseases notified and the means taken to prevent their spread.

During the year there were 280 cases of Infectious Diseases notified to the Council against 177 last year, and 103 the year before. The following were the cases notified—Scarlet Fever, 182; Diphtheria, 45; Croup, 6; Erysipelas, 19; Varicella, 27; and about 150 cases of Measles that were not

notified, making a total of 129 cases in all. There were a larger number of Infectious Diseases notified this year than there has been for the last 16 years, chiefly Scarlet Fever and Diphtheria. The first cases of Scarlet Fever and Diphtheria were notified on the 1st January. They continued steadily increasing every month throughout the whole year without intermission, in fact the town has not been free from Scarlet Fever for one week during the whole year.

The following table shows the notifications during the year:—

Disease.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total.
Scarlet Fever	5	6	10	6	4	11	16	27	26	33	26	12	182
Diphtheria	4	5	5	3	3	5	4	3	2	2	4	5	45

Out of the 182 cases of Scarlet Fever 45 were sent to the Draycott Hospital, and 6 cases of Diphtheria out of 45, making a total of 51 at three guineas each, costing £160 13s. together with Doctors' Fees. I consider it a very expensive way of dealing with Scarlet Fever, and a failure, as it does not carry out the intention of an infectious hospital as a means of checking the spread of infectious Diseases. It would be much better if the money was spent in trying to prevent the occurrence of Infectious Disease in the first instance than to be spending it on treating them afterwards.

The Infectious Diseases rate for the year was 17·1.

The following table shows the Infectious Diseases notified during the year 1905 :

Notifiable Disease.	Cases notified in whole district.							No cases removed to Hospital
	At all Ages.	At Ages. Years.						
		Under 1	1-5.	5-15.	15-25.	25-65	65 and upwds	
Small-pox								
Diphtheria	40		7	22	6	5		6
Membranous Croup ..	6		6					
Erysipelas	17	1			4	12		
Scarlet Fever	182	3	36	102	34	7		45
Enteric Fever								
Chicken-pox	24	1	11	12				
Measles	150							
Total	419	5	60	136	44	24		51

The following table shows the number of Infectious Diseases notified during the last ten years :—

Notifiable Disease.	1896	1897	1898	1899	1900	1901	1902	1903	1904	1905
Small-pox	0	0	0	0	0	0	2	19	0	0
Diphtheria	2	14	12	6	1	1	4	5	29	45
Membranous Croup ..	2	0	5	5	1	1	1	2	0	6
Erysipelas	19	21	21	10	9	24	17	13	15	17
Enteric Fever	21	44	16	5	9	15	4	1	1	0
Puerperal Fever	1	0	2	1	0	0	0	1	0	0
Whooping Cough	0	0	0	0	0	0	0	0	1	0
Measles	0	0	0	0	0	0	0	0	0	150
Scarlet Fever	25	39	80	16	34	67	33	36	69	182
Total	70	118	133	43	54	108	61	77	115	400

Average for ten years—117·0.

The following measures have been adopted by the District Council to check the spread of Infectious Diseases :—

- I. — Infectious Diseases Prevention Act, 1890, is adopted.
- II. — Public Health Acts Amendment Act, 1896.
- III. — Infectious Diseases Prevention Act, 1889.
- IV. — Notification sent to Elementary and Sunday Schools.
- V. — Verbal and printed instructions sent to every infected house.
- VI. — All houses are disinfected by the Sanitary Authority.
- VII. — Infectious Hospital at Draycott for Scarlet Fever and Diphtheria.
- VIII. — Small-pox Hospital erected by Council.
- IX. — In future, when Free Library is opened, a list of infected houses will be sent to the Librarian, so that library books will not be lent to infected houses.

Action taken with regard to Infectious Diseases.

SMALL-POX.—There was no case of Small-pox notified during the year.

ENTERIC FEVER. —There was no case of Enteric Fever notified. This is the first year for 20 years that the Town has been entirely free from Enteric Fever. There was only one case last year, and one the year before. In 1897 there were 44 cases. The number of cases have gradually diminished during the last 10 years.

SCARLET FEVER. —There were 182 cases notified, spread all over the District. 45 of these were removed to Draycott Hospital; the remainder were isolated at home and confined to their rooms for six weeks. Disinfectants were regularly sent by the Council to each house. When the

Doctor in attendance certified they were free from infection the rooms were disinfected, and certificates granted to the children to return to school again. The great majority of the cases were spread through school infection—principally through the Infants' Schools. There were only two deaths; most cases were slight in character.

DIPHTHERIA.—There were 45 cases of Diphtheria, with 7 deaths. Antitoxin is now provided by the Council free of expense, so that all persons shall have the opportunity of being treated by this valuable remedy. This is the largest number of cases of Diphtheria for the last 10 years. In some cases sanitary defects were found, but school infection was the principal cause of the spread; none could be traced to milk or other food infection.

ERYSIPELAS.—There were 17 cases of Erysipelas, mostly facial Erysipelas and local injuries.

PUERPERAL FEVER.—There was no case of Puerperal Fever notified.

VARICELLA.—There were 24 cases of Varicella, all amongst school children. The same measures were adopted with these cases as with other Infectious Diseases—children were kept away from school.

MEASLES.—There was rather a large outbreak of Measles in July and August. I estimated the number to be about 150. The schools were ordered to be closed, as it was close to the holidays, so that they would be a clear six weeks closed and give an opportunity for all cases to get recovered before the schools opened again. Measles spread very rapidly in schools, as the symptoms are rather indefinite in the early stages.

Notes upon the Sanitary Work of the Year.

It will be seen from the Report of the Sanitary Inspector that a considerable amount of work has been done during the year. I would suggest that all drains for new buildings, as well as drains reconstructed, should stand the water test. If there is a lack of this test many drains passed as sound will prove in a short time to be faulty and a great source of danger to the public health, as our District is most difficult to drain properly, there being very little fall. The health of every town depends largely on its Water Supply, its Housing, and its Drainage. The fact that we have no Enteric Fever this year I attribute to the improved condition of drainage; a number of old and defective drains have been taken up and relaid. Sewers constantly and regularly flushed is more necessary now than ever, as the number of w.c.'s. used in the District are rapidly increasing every year.

General Sanitation.

New Houses erected, 1903	390
New Houses erected, 1904	200
New Houses erected, 1905	235
Wells Closed and Town Water supplied	Nil

Plans of Factories and Workshops Approved during the Year 1905.

1. Draughting Room, Union Street.
2. Factory, High Street.
3. Additions to Oakley Mills.
4. Blacknock's Factory, Milner Road.
5. Work Room, Harrington Factory.
6. Engineers' Workshop, Sawley Road.
7. Factory, Milner Road.

8. Fitting Shop, Gas Company.
9. Work Room, Harrington Factory.
10. Bake-house, corner of Curzon St. and Canal St.
11. Number of w.c's. erected—300.

CONVERSION OF PRIVY MIDDENS. —During the year particular attention has been directed towards the total abolition of privy middens from the District, and it is a source of satisfaction to record that during the year 43 of these pits have been filled up and meter water closets or pans for weekly collection adopted. It is a matter of regret, however, that the conversion of these privy middens should increase the number of pans, which are not a desirable substitute. There now remains only 40 privy middens in the District, 18 of which are in isolated places, whilst a few years ago there were several hundreds. This is a most satisfactory sanitary improvement in the Town, as they have always been a source of danger to the public health, a nuisance to clean out, and a permanent danger while full. All efforts should be used to complete the abolition of the whole lot. They remain a danger while one is left in the District.

The following is a list of improvements effected, in many cases new drainage, paving, and other defective sanitary conditions have been remedied :—

21 Pits into 36 Pans	}	Affecting the Sanitary Condition of 93 Houses.
22 Pits into 53 w.c's.		
3 Pans to 4 w.c's.		

In all new houses w.c's. are adopted.

EXCREMENT AND SEWAGE DISPOSAL.

Public Scavenging is adopted throughout the District, and is done by the Council's men weekly. Refuse is conveyed

to the Sewage Farm and burnt. A Refuse Destructor will soon be required to deal with the increasing quantity of house refuse.

The following are Registered in the District:

Buildings and Trades.				No. on Register.	Remarks on Condition.
1.	Workshops	..	..	60	Clean and well ventilated.
2.	Common Lodging-houses	..	..	1	Badly kept.
3.	Slaughter-houses	..	..	13	All required lime-washing.
	(Dairies	..	..
4.	Cowsheds	..	..	8	Clean and well kept, except one.
	(Milkshops	..	..
5.	Bakehouses	..	..	9	Clean ; required lime-washing.
Total				91	

BYE-LAWS.

Bye-laws belonging the following matters have been adopted :

1. New Streets and Buildings.
2. Common Lodging-houses.
3. Scavenging.
4. Measures.
5. Markets.
6. Slaughter-houses.
7. Public Baths.
8. Houses Let in Lodgings.
9. Cemeteries.
10. Mortuaries.
11. Offensive Trades.
12. Open Space.
13. Vans and Tents.

The following Dairies and Milk-shops are Registered:

No.	Dairy.	Owner.	Nature of Employment.	Remarks.
1	20, College St.	Marshall, John	Milk Purveyor	Clean and well kept
2	Nottm. Road	Adams, George	"	"
3	6, Claye Street	Thorpe, Benjmn	"	"
4	Wellington St.	Hallam, Alfred	"	"
5	Main Street	Co-op. Society	"	"
6	22, Station Road	Barker, Robert	"	"
7	12, Station Road	Neddham, Eb.	"	"
8	80, Derby Road	Hutchings, M.	"	"
9	Wellington St.	Bates, T.	"	"

I have visited all these shops where milk is kept, and found them clean and suitable places to keep and store milk.

BAKEHOUSES.—There are 9 Bakehouses in the District. They are inspected twice a year, are fairly clean, and all required lime-washing. Notices were served on them for lime-washing and all complied with the notices. There are no underground Bakehouses, nor have they any drains open into them. There are no sleeping places in connection with any of the Bakehouses.

SLAUGHTER-HOUSES.—There are 13 registered. I visited them twice in the year and found them fairly clean except two - one in Nelson Street, which was very dirty and heaps of refuse all over the yard and dead rats. Notices were served on the owners and occupiers to remedy the nuisance arising from them. They were visited again to see if the notices were complied with, when they were found much improved. Nothing is done in these slaughter-houses except killing. No food is prepared in them. This is an important matter, and a safe-guard to the public against Bacterial Poisoning.

COMMON LODGING-HOUSES.--There is only one on the Register. It is not by any means a model lodging-house. The arrangements for the separation of the sexes is not sufficient ; neither is there sufficient accommodation for washing. It is registered for 18 beds, but is often overcrowded. It would pay the Council to build one of their own.

HOUSE ACCOMMODATION.—Workmen's cottages here are of a very superior class. They are clean and well-built ; wide streets and plenty of air-space, with paved back yards. The rents are rather high. New streets are being built every year, so there is little over-crowding anywhere. Still there is a great want of a cottage at a much cheaper rent. Most cottages let at 5/6 and 6/6 per week, which is much too high a rate for working people, and deprives families of many things which would be beneficial to them in other respects if the money could be spared for more and better food and clothing so necessary to young children. All the new cottages are supplied with Town Water, and most of them with electric light. The old middens are abolished from all new houses and dust pans supplied instead, which are emptied weekly by the Council's men.

SEWERAGE AND DRAINAGE.—More filter beds are required at the Sewage Farm for the increasing quantity of sewage since the introduction of w.c's. Some alterations have been made at the precipitating tanks ; a further enlargement would make a great improvement. The old tanks are too far away from the well. By enlarging the one close to the engine-house there would be a great saving of labour and expense, and a better and cleaner effluent would result, and the sewage could easily gravitate back into the sludge well and save pumping. There is danger of the filter beds

being interfered with by floods from the backing-up of the brook. The lower level of the Sewage Farm soon gets covered with water in a flood, and will soon necessitate making other arrangements. The heap of refuse down there is getting a very large size, and will soon require a Destructor.

EXCREMENT DISPOSAL.—The water carriage system is now generally in vogue and superseding the old pail system, which was getting very difficult to deal with, besides being very expensive, and objectionable in many ways.

WATER SUPPLY.—Weekly pumping from the well:

1903	...	2,400,000	gals.
1904	...	2,500,000	„
1905	...	2,600,000	„

Owing to the great scarcity of rain for the last two years precautions had to be taken to safeguard a sufficient supply of water for all purposes. It was cut off at night some time back to prevent all waste and save the well. Recently there has been a good deal of rain, and it is to be hoped the water will soon be turned on again. The quality of the water still remains very pure. The following is an analysis recently made by Prof. Franklind:—

“Oct. 6th.—Herewith I enclose the result of analysis of the sample of water sent by you from Long Eaton on the 30th ult. : This water is clear, palatable, and of an extremely high degree of organic purity. It is also free from ammonia, and contains a negligible proportion of nitrates. The water is of excellent quality for drinking, but unsuitable, in consequence of its hardness, for washing and steam purposes.”

This analysis is most satisfactory, and helps to explain the fact that our Town is so free from Enteric Fever.

OFFENSIVE TRADES.—No complaints were made during the year of any nuisance arising from Offensive Trades of any kind. The market stalls are regularly visited on market nights; meat and fish and all kinds of foods exposed for sale are inspected. I did not find any bad food of any kind during the year. It is a long time since we had occasion to prosecute for bad food. There is no meat sold now in the market except that killed in the town. There used to be a lot of meat brought from other places, but none lately.

ICE-CREAM SHOPS.—During the hot weather the premises of ice-cream vendors were visited for the purpose of ascertaining the conditions under which that article was prepared, and in all cases the persons engaged were found to be taking reasonable precautions to secure cleanliness in its manufacture.

FISHMONGERS' SHOPS.—In consequence of complaints of a nuisance from the accumulation of empty boxes and other refuse at fishmongers, inspections were made during the summer months, and only in one case was there found any delay in the removing of offal. There is little inconvenience caused from this trade, which might be a source of nuisance from decomposing fish and other accumulations.

Factory and Workshop Act, 1901.

Report of the Medical Officer of Health on the administration of the Act in the Long Eaton Urban Sanitary District for the Year 1905.

**FACTORIES, WORKSHOPS, LAUNDRIES, AND HOME-WORK.
CLASSIFICATION AND INSPECTION.**

The number of premises registered under the Factory

and Workshop Act has been increased to 61, and are as follows : -

Work done.								No. on Register.
Dressmaking	..	..	..	..	..	..	..	8
Lace Mending	..	..	..	..	..	..	..	4
Plumbing	..	..	..	..	..	..	..	4
Boot Repairing	..	..	..	..	..	..	..	5
Tailoring	..	..	..	..	..	..	..	6
Millinery	..	..	..	..	..	..	..	6
Blacksmiths	..	..	..	..	..	..	..	3
Bakehouses	..	..	..	..	..	..	..	9
Joinery	..	..	..	..	..	..	..	3
Carriage Building	..	..	..	..	..	..	..	1
Machinists	..	..	..	..	..	..	..	4
Masons	..	..	..	..	..	..	..	2
Wheelwright	..	..	..	..	..	..	..	1
Card Punching	..	..	..	..	..	..	..	2
Cycle Repairing	..	..	..	..	..	..	..	3
Total	..	..	..	..	..	..	..	61

The total number of Factories in the District is 30.

There were 3 New Factories erected this year in the District, and 2 just outside, at New Sawley.

All these Workshops and Workplaces have been inspected. They were found clean and healthy, and in every respect complied with the Regulations. A few required lime-washing, and a few new ones required an Abstract. The new shops were measured, and the number of persons allowed to work written on the Abstract.

There were no dirty or dangerous work carried on in these places. There were 16 visits made to Factories ; 98 to Workshops ; 6 to Workplaces ; and 67 to Home-workers houses. In one Outworker's home Diphtheria was in the house, and the lace found there was fumigated and returned to the owner, notice being served not to supply any more till the house was free from infection.

Total Number of Visits made ... 187.

Homework (Section 107 to 115).

The total number of lists of Outworkers sent in was 52 and 64. Some difficulty was experienced in getting those lists in, so I sent notice to all the lace manufacturers in the district, and, after a while, the whole lists were sent in. A Register is kept of the names and addresses of Outworkers, and the houses watched for the occurrence of Infectious Disease there. Most of the Outwork done is Lace Mending and Tailoring. Notices were sent to the Manufacturing Houses of Nottingham and Derby of Outworkers here from their Districts.

Sanitation.

CLEANLINESS.—General condition of all the shops is good.

AIR-SPACE.—General condition good; no over-crowding. In some cases windows were found closed and not usually opened.

VENTILATION.—Generally good. Ventilation effected by windows, doors, and fire-places.

A. B. CHAMBERS, M.D.,

Medical Officer of Health.



APPENDIX.

1. Table I. Local Government Board—Vital Statistics of the whole District during 1905 and previous years.
2. Table III. Local Government Board—Cases of Infectious Diseases reported during 1905.
3. Table IV. Local Government Board—Causes of, and ages at, Death during 1905.
4. Table V. Local Government Board—Infant Mortality during 1905, deaths from stated causes in weeks and months under one year of age.
5. Home Office Table—Factory and Workshops Act, 1901.

Table 1. Vital Statistics of whole District during 1905 and previous Years.

Year	Population estimated to middle of each year.	Births.		Total Deaths Registered in the District.			Deaths of Non residents registered in Public Institu- tions in the District		Deaths of Insalubers registered in Public Institutions beyond the District		Net Deaths at all Ages belonging to the District	
		Number		Under 1 year of age.		At all ages.		Public Institutions in the district	10	11	12	13
		3	4	Number	Rate per 1000 births registered	Number	Rate.					
1	2	3	4	5	6	7	8	9	10	11	12	13
1895	11,500	306	31.8	38	103.8	122	11.1	..	..	..	122	11.1
1896	11,280	316	30.6	39	112.7	117	10.4	..	..	..	117	10.4
1897	11,735	366	31.18	65	177.5	153	13.2	..	..	..	153	13.2
1898	12,400	358	28.90	47	131.2	148	12.4	..	..	..	148	12.4
1899	12,780	332	29.60	46	138.5	151	12.2	..	..	..	151	12.2
1900	13,050	375	28.73	57	152	162	12.7	..	..	..	162	12.7
1901	13,130	351	26.96	68	192	150	11.4	..	..	..	150	11.4
1902	13,500	388	28.07	49	126.5	141	10.4	..	..	..	141	10.4
1903	15,100	107	26.81	58	142.5	170	11.2	..	..	..	170	11.2
1904	14,640	388	25.8	75	197.3	171	11.6	..	..	..	171	11.6
Averages for years 1895-1904	12,811	370	28.74	54	147.4	148	11.6	..	..	..	148	11.6
1905	15,300	444	28.9	55	123	175	11.4	..	..	..	175	11.4

Area of District in acres (exclusive of area covered by water) .. 2,099.

Total population at all ages, 13,045.

Average number of persons per house, 5.5 (at census of 1901).
Number of inhabited houses, 2,589.

TABLE III. - Cases of Infectious Disease notified during the Year 1905.

Notifiable Disease.	Cases notified in whole district.							No. cases removed to Hospital
	At all Ages.	At Ages.—Years.						
		Under 1	1-5.	5-15.	15-25.	25-65.	65 and upwds	
Small-pox								
Cholera								
Diphtheria	40		7	22	6	5		
Membranous Croup	6		6					6
Erysipelas	17	1			4	12		
Scarlet Fever ..	175	3	36	95	34	7		45
Typhus Fever ..								
Enteric Fever ..								
Relapsing Fever ..								
Continued Fever ..								
Puerperal Fever ..								
Plague								
Varicella	24	1	11	12				
Totals	262	5	60	129	44	24		51

Table IV.

Causes of, and ages at, Death during Year 1905.

Causes of Death	All ages.	Under 1 year.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Deaths in localities at all ages.	Deaths in Public Institutions.
Small pox									
Measles	4		4						
Scarlet Fever	2		2						
Whooping-cough	2	2							
Diphtheria and membranous croup	7		5	2					
Croup	2		2						
(Typhus)									
Fever - Enteric									
(Other continued)									
Epidemic Influenza									
Cholera									
Plague									
Diarrhoea	7	6	1						
Enteritis	6	5	1						
Puerperal Fever									
Erysipelas									
Other Septic Diseases									
Phthisis	16		1	1	6	7	1		
Other Tubercular Diseases	2		1				1	Nil.	Nil.
Cancer, Malignant Disease	8					3	5		
Bronchitis	15	7	4		1	1	2		
Pneumonia	5	1	1	1			2		
Pleurisy									
Other Diseases of Respiratory Organs									
Alcoholism									
Cirrhosis of Liver	4					2	2		
Venereal Diseases	1					1			
Premature Birth	16	16							
Diseases & accidents of parturition									
Heart Diseases	18	1			1	9	7		
Accidents									
Suicides	3					3			
Apoplexy	5					5			
Tabs Mesenterica	2								
Convulsions	10	7	3						
All other causes	40	8	2	3		10	17		
All causes	175	55	27	7	8	13	35		

Cause of Death.		Under 1 Wk.												Total Deaths under One Year.			
		1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.		9-10 Months.	10-11 Mths.	11-12 Mths.
All Causes.	(Certified) (Uncertified)	14 2	4	2	3	23 2	1	6	1	3	8	4	1	2	3	1	53 2
Common Infectious Diseases	Small-pox																
	Chicken-pox																
	Measles																
	Scarlet Fever																
	Diphtheria: (young)														1		
	Whooping Cough																
Diarrhoeal Diseases	Diarrhoea, all forms		1	1		2		1			2		1	1	1	1	
	Enteritis (not Tuberculous)				1	1		1			1			1			
	Gastritis, (Gastro-intestinal Catarrh)																
	Premature Birth	14 1			1	15 1											
Wasting Diseases	Congenital Defects																
	Injury at Birth																
	Want of Breast-milk											1					
	Atrophy, Debility, Marasmus																
Tuberculous Diseases	Tuberculous Meningitis:																
	Tuberculous Peritonitis:																
	Tabes Mesenterica																
	Other Tuberculous Diseases																
	Erysipelas																
	Syphilis																
	Rickets																
	Meningitis (not Tuberculous)																
	Convulsions	1	3	1	1	5 1		1		2	2	1					
	Bronchitis																
	Laryngitis								1								
	Pneumonia							1									
	Suffocation, overlaying														1		
Other Causes						1											
		16	4	2	3	25	1	6	1	3	8	4	1	2	3	1	55

Births in the year

legitimate—44.
illegitimate—No statistics.

Deaths from all causes at all ages—175.
Population (estimated to middle of 1905)—15,300.

Births in the year
legitimate—444.
illegitimate—No statistics.

Deaths from all causes at all ages—175.
Population (estimated to middle of 1905)—15,300.

Factories, Workshops, Laundries, Workplaces and Homework.

1. INSPECTION. (Including inspections made by Sanitary Inspectors or Inspectors of Nuisances).

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
Factories (including Factory Laundries)	16	4	
Workshops .. Workshop ..	98		
Workplaces	6		
Homeworkers' Premises .. .	64		
Total .. .	184	4	

2.—DEFECTS FOUND.

Particulars.	Number of Defects			No. of Prosecutions.
	Found	Remedied.	Refrd. to H.M.I.	
<i>Nuisances under the Public Health Acts :—</i>				
Want of cleanliness				
Want of ventilation				
Overcrowding				
Want of drainage of floors				
Other nuisances				
Sanitary Accommodation (Insufficient	1	1		
Unsuitable or Defective .. .				
(Not Separate for Sexes .. .	1			
<i>Offences under the Factory and Workshop Act :—</i>				
Illegal occupation of underground bakehouse				
Breach of Special Sanitary requirements for bakehouses	4	4		
Failure as regards lists of outworkers ..	15	15		
Giving out work to be done (Unwholesome .. in premises which are (Infected ..	1			
Allowing wearing apparel to be made in premises infected by scarlet fever or smallpox				
Other offences				
Total	22	20		

3. OTHER MATTERS.

Class.		Number	
Matters notified to H.M. Inspectors of Factories : —		3	
Failure to affix Abstract of the Factory and Workshop Act		1	
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act		(Notified by H.M. Inspectors Reports (of action taken) sent to H.M. Inspectors ..	
Other			
Underground Bakehouses :			
Certificates granted during the year			
In use at the end of the year			
Homework :		Number of	
<i>List of Outworkers : —</i>		Lists.	Out-workers.
Lists received		52	64
Addresses of Outworkers		{ Forwarded to other Authorities Received from other Authorities	
		4	
		3	
<i>Homework in unwholesome or infected premises : —</i>		Wearing Apparel.	Other.
Notices prohibiting homework in unwholesome premises			
Cases of infectious disease notified in homeworkers premises		1	
Orders prohibiting homework in infected premises ..			
Workshops on the Register at the end of the year		60	
Important classes of workshops, such as workshop bakehouses, may be enumerated here.			
Total number of workshops on Register ..		60	